

## In the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Currently Amended) A wound dressing comprising:
  - (a) a donor layer comprised of a therapeutic agent; and
  - (b) a barrier layer, said barrier layer comprising a matrix comprising polymers joined by cross-linkages which cross-linkages comprise ~~or consist of~~, oligopeptidic sequences which are cleavable by a protease associated with wound fluid such that the rate of release of the therapeutic agent increases in the presence of the protease, wherein the barrier layer initially separates the donor layer in the wound dressing from wound fluid when in use.
2. (Original) A wound dressing according to claim 1 wherein the protease is associated with wound infection or ulcer formation.
3. (Currently Amended) A wound dressing according to claim 1 ~~or 2~~ wherein the polymers themselves are not degraded by the protease or other factors that may be present in the wound environment.
4. (Currently Amended) A wound dressing according to claim 1, ~~2 or 3~~ wherein the polymer is a synthetic polymer.
5. (Original) A wound dressing according to claim 4 wherein the polymer is a polymer of N- (2-hydroxypropyl) methacrylamide (HPMA).
6. (Currently Amended) A wound dressing according to claim 1 ~~any one of the preceding claims~~ wherein the oligopeptidic sequences consist of 3 to 15 amino acids.
7. (withdrawn) A wound dressing according to any one of the preceding claims wherein the protease is elastase and wherein the oligopeptidic sequence comprises or consists of lys-gly-ala-ala-ala-lys (SEQ ID NO: 1) -Ala-Ala-Ala-, Ala-Ala-Pro-Val (SEQ ID NO: 2), Ala-Ala-Pro-Leu (SEQ ID NO: 3), Ala-Ala-Pro-Phe (SEQ ID NO: 4), Ala-Ala-Pro-Ala (SEQ ID NO: 5) or Ala-Tyr-Leu-Val (SEQ ID NO: 6).
8. (withdrawn) A wound dressing according to any one of claims 1 to 6 wherein the protease is a matrix metalloproteinase and wherein the oligopeptidic sequence comprises or consists of Gly-Pro-Y-Gly-Pro-Z- (SEQ ID NO: 7), -Gly-Pro-Leu-Gly-Pro-Z- (SEQ ID NO: 8), -Gly-Pro- Ile-Gly-Pro-Z- (SEQ ID NO: 9), or -Ala-Pro-Gly-Leu-Z- (SEQ ID NO: 10), where Y and Z are amino acids.

9. (withdrawn) A wound dressing according to any one of claims 1 to 6 wherein the protease is a collagenase and wherein the oligopeptidic sequence comprises or consists of-Pro-Leu-Gly-Pro-D-Arg-Z- (SEQ ID NO: 11),-ProLeu-Gly-Leu-Leu-Gly-Z- (SEQ ID NO: 12),-Pro-Gln-Gly- Ile-Ala-Gly-Trp- (SEQ ID NO: 13),-Pro-Leu-Gly-Cys (Me)-His- (SEQ ID NO: 14),-Pro-Leu-Gly-Leu-Trp-Ala- (SEQ ID NO: 15),-Pro-Leu-Ala-Leu-Trp-Ala-Arg- (SEQ ID NO: 16), or-Pro-Leu-Ala-Tyr-Trp-Ala-Arg- (SEQ ID NO: 17), where Z is an amino acid.

10. (withdrawn) A wound dressing according to any one of claims 1 to 6 wherein the protease is a gelatinase and wherein the oligopeptidic sequence comprises or consists

11. (currently amended) A wound dressing according to claim 1 ~~any one of claims 1 to 6~~ wherein the protease is thrombin and wherein the oligopeptidic sequence comprises ~~or consists of~~ -Gly-Arg-Gly-Asp- (SEQ ID NO: 19),-Gly-Gly-Arg-, -Gly-Arg-Gly-Asp-Asn-Pro- (SEQ ID NO: 20),-Gly-Arg- Gly-Asp-Ser- (SEQ ID NO: 21),-Gly-Arg-Gly-Asp-Ser-Pro-

12. (withdrawn) A wound dressing according to any one of claims 1 to 6 wherein the protease is stromelysin and wherein the oligopeptidic sequence comprises or consists of-Pro-TyrAla-Tyr-Trp-Met-Arg- (SEQ ID NO: 23).

13. (currently amended) A wound dressing according to claim 1 ~~any one of the preceding claims~~ wherein the therapeutic agent is an antimicrobial agent, a pain relieving agent, an antiseptic, an analgesic, a local anaesthetic, or a protease inhibitor.

14. (currently amended) A wound dressing according to claim 1 ~~any one of the preceding claims~~ wherein the therapeutic agent is incorporated within the matrix.

15. (currently amended) A wound dressing according to claim 14 wherein the wound contacting layer of the dressing may comprise ~~or consist of~~ the matrix within which the therapeutic agent is incorporated.

16. (currently amended) A wound dressing according to claim 15 wherein the dressing comprises a liquid permeable wound contacting layer, an intermediate layer comprising ~~or consisting of~~ the matrix within which the therapeutic agent is incorporated and an outer, liquid-impervious backing layer.

17. (cancelled)

18. (currently amended) A wound dressing according to claim [17] 1 wherein the barrier layer comprises an apertured sheet having a composition comprising the cross-linked polymers applied thereto in occlusive fashion.

19. (currently amended) A wound dressing according to claim 1 ~~47 or 48~~, wherein a the donor layer ~~of the therapeutic substance~~ is provided behind the barrier layer.

20. (cancelled)

21. (cancelled)

22. (currently amended) A wound dressing according to claim 1 ~~any one of the preceding claims~~ wherein the wound dressing comprises an absorbent layer and/or a backing layer.

23. (New) A wound dressing comprising;

- (a) an absorbent layer comprising a therapeutic agent dispersed therein; and
- (b) a barrier layer comprising a matrix comprising polymers joined by cross-linkages, which cross-linkages comprise oligopeptidic sequences which are cleavable by a protease associated with wound fluid such that the rate of release of the therapeutic agent increases in the presence of the protease, wherein the absorbent layer is provided behind the barrier layer and the barrier layer initially separates the absorbent layer in the wound dressing from wound fluid when in use.